## MEAN LAKE LEVELS DURING JUNE, 1921.

By United States Lake Survey.

[Detroit, Mich., July 5, 1921.]

The following data are reported in the "Notice to Mariners" of the above date.

Data.	Lakes.*			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during June, 1921: Above mean sea level at New York Above or below—	Feet. 602. 43	Feet. 580. 58	Fcet. 573. 02	Feet. 246. 61
Mean stage of May, 1921	+0.31	0.00	-0.07	-0.07
Mean stage of June, 1920	-0.21	_0.27	+0.54	+1.05
Average stage for June, last 10 years.	+0.10	-0.31	+0.13	-0.23
Highest recorded June stage	-1.00	-3.02	-1.50	
Lowest recorded June stage	+1.19	+0.68	+1.45	+1.72
Average relation of the June level to: May level.		+0.30	+0.20	+0.20
July level.		-0.10	0.00	0.0

• Lake St. Clair's level in June, 575.69 feet.

## EFFECT OF WEATHER ON CROPS AND FARMING OPERA-TIONS, JUNE, 1921.

By J. B. KINCER, Acting Chief of Division.

[Weather Bureau, Washington, July 25, 1921.]

The weather during June was generally favorable for outdoor work in practically all sections of the country, except for considerable interruption to harvest and cultivation of row-crops from the southern Great Plains southward to the Gulf. In other sections cultivation made rapid progress and fields were generally clean at the close of the month. Temperatures were high for the season in the central and northern sections of the country and favorable for warm-weather crops wherever moisture was sufficient. Rainfall was generally ample west of the Mis-

sissippi River, but was deficient in many sections to the eastward, particularly in localities from the Ohio Valley southward.

The weather was generally favorable for corn, especially in the trans-Mississippi States, and that crop made satisfactory advance throughout the principal producing area, except that it was in need of moisture in some east-central and southeastern districts, particularly in the latter area. The high temperatures caused wheat to ripen rapidly in Central and Northern States, in fact too rapidly in many localities, and considerable harm resulted. Spring wheat was favorably affected by the weather during the first half of the month, but the latter half was less favorable for this crop; it was too warm for best development and droughty conditions prevailed in some sections. It was also too warm for oats and potatoes in central and northern districts and too dry in many eastern localities, although there was improvement by rains the latter part of the month in some east-central districts

Cotton made fairly good advance in most sections of the belt during the month, with steady improvement reported quite generally. The latter part of the month received too much rain, however, in Texas, Oklahoma, and Arkansas, while the soil had become very dry in some Eastern States, particularly in Georgia. Cultivation was hindered in the northwestern portion of the belt and the fields became grassy. Weevil activity increased materially during the month; they were numerous in the southeastern portion of the belt and doing considerable damage notwithstanding the dry weather.

Meadows and pastures made satisfactory growth between the Mississippi River and the Rocky Mountains, as a rule, and ranges continued in good condition in the upper and most central Rocky Mountain States, but were very dry and stock suffered for lack of water in the far Southwest. Grass and truck crops suffered for moisture also in many localities east of the Mississippi River.